

**Listing of Claims:**

56. (currently amended) A supramolecular structure comprising:  
a multi-generation dendrimer comprising a core, a plurality of interior generations spherically disposed around the core and an outermost generation comprising a plurality of dendritic branches having terminal groups sufficiently reactive to undergo addition or substitution reactions; and  
at least one cross-linkable moiety bonded to the terminal groups of each dendritic branch via a labile bond; wherein the cross-linkable moieties of adjacent dendritic branches are intramolecularly cross-linked to form a dendrimer having an intramolecularly cross-linked peripheral surface, wherein the core dendrimer contains catalytic centers.
57. (previously amended) The supramolecular structure of claim 56, wherein the dendrimer is selected from the group consisting of poly(propylenimine) (DAB) and polyamidoamine (PAMAM) dendrimers.
58. (previously amended) The supramolecular structure of claim 56, wherein the labile bond is selected from the group consisting of silicon-oxygen, silicon-oxygen-carbon, oxygen-nitrogen, nitrogen-silicon, nitrogen-carbonyl-nitrogen, silicon-acetylene, amide, blocked isocyanates and ureas.
59. (previously amended) The supramolecular structure of claim 58, wherein the labile bond is a nitrogen-silicon bond.
60. (previously amended) The supramolecular structure of claim 56, wherein the dendritic branches are intramolecularly crosslinked by one method selected from group consisting of hydrosilation, olefin metathesis, radical polymerization, polycondensation, anionic polymerization, cationic polymerization and coordination polymerization.